

**Amendments to the Claims:**

The listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

Claims 1-7 (canceled)

Claim 8 (currently amended): An apparatus comprising:

a master system including: a master memory and a storage mechanism for storing a first remote boot image and a second remote boot image, and a master system controller;

a first slave system including: a first memory and a first programmable interface coupled to the master system, the first programmable interface including a first system controller; ~~and~~

a second slave system including: a second memory and a second programmable interface coupled to the master system, the second programmable interface including a second system controller; and

a bus communicatively coupling the master system, the first slave system, and the second slave system;

wherein the master system is configured to ~~perform one or more operations to identify one or more characteristics of each of the first slave system and the second slave system after the master system is booted and the first and second system controllers are released by the master system, said operations including interrogating~~ interrogate the first and ~~the~~ second slave systems to identify their respective ~~said one or more~~ characteristics of each of the first and the second slave systems; wherein the master system is configured to determine that the first remote boot image should be used for the first slave system in response to said interrogation of the first slave system and based on said identified characteristics of the first

slave system, and to update the first programmable interface to cause the first slave system to retrieve the first remote boot image and to boot from said retrieved first remote boot image; and wherein the master system is configured to determine that the second remote boot image should be used for the second slave system in response to said interrogation of the second slave system and based on said identified characteristics of the second slave system, and to update the second programmable interface to cause the second slave system to retrieve the second remote boot image and to boot from said retrieved second remote boot image; wherein said operations of updating the first programmable interface and the second programmable interface includes: the master system assigning each of the first and the second system controllers an address or range of addresses to be used by the master system for accessing registers of first and the second system controllers; and the master system manipulating said registers of the first and second system controllers and programming the master system controller such that an address that is part of the boot-code range of addresses is redirected for accessing the first remote boot image by the first slave system and the second remote boot image by the second slave system.

Claim 9-12 (canceled)

Claim 13 (currently amended): A method performed in an apparatus including a master system communicatively coupled to a slave system, the master system including a master processor, a master memory associated with the master processor, a master system controller, and a storage mechanism configured to store information, the information including a plurality of remote boot images; the slave system including a slave processor, a slave controller and a memory associated with the slave processor; the method comprising:

the master system performing one or more operations to interrogate the slave system to identify one or more characteristics of the slave system, and to determine a boot image from the plurality of remote boot images based on said one or more characteristics identified during the interrogation operation;

the master system assigning the slave controller an address or range of addresses to be used by the master system for accessing one or more registers of the slave controller;

the master system manipulating said registers of the slave controller and programming the master system controller such that an address that is part of the boot-code range of addresses is redirected for accessing the remote boot image by the slave system;

the slave controller sending a boot request to the master system controller;

the master system controller, in response to the boot request, causing the boot image determined based on said one or more characteristics identified during the interrogation operation to be retrieved from the storage mechanism and communicated to the slave controller;

the slave controller relaying the boot image to the slave processor or the memory associated with the slave processor; and

the slave processor booting with the boot image determined by the master system based on said one or more characteristics identified during the interrogation operation.

Claims 14-30 (canceled)

Claim 31 (previously presented): The apparatus of claim 8, wherein said one or more characteristics include its type.

Claim 32 (previously presented): The apparatus of claim 31, wherein said one or more characteristics include its version.

Claim 33 (previously presented): The method of claim 13, wherein said one or more characteristics include its type or version.

Claim 34 (canceled)

Claim 35 (previously presented): The apparatus of claim 8, wherein said one or more characteristics include its version.

Claims 36-39 (cancelled)

Claim 40 (previously presented): The method of claim 13, wherein said operation of the slave controller sending the boot request to the master controller includes the slave controller translating an original boot address to a remote boot address for accessing the boot image determined based on said one or more characteristics identified during the interrogation operation to be retrieved.

Claim 41 (previously presented): The method of claim 40, wherein the slave system includes a boot ROM; and wherein the original boot address refers to a location in the boot ROM.

Claim 42 (previously presented): The method of claim 13, wherein said one or more characteristics include its type.

Claim 43 (previously presented): The method of claim 42, wherein said one or more characteristics include its version.

Claim 44 (previously presented): The method of claim 13, wherein said one or more characteristics include its version.

Claim 45 (currently amended): An apparatus comprising:

a master system; and

a slave system including: a memory and a programmable interface coupled to the master system, the programmable interface including a slave system controller;

wherein the master system includes: a master memory, a storage mechanism for storing a plurality of remote boot images, the plurality of remote boot images including a remote boot image; a master system controller, means for performing one or more operations to identify one or more characteristics of the slave system, said operations including interrogating the slave system to identify its respective said one or more characteristics; means for determining that the remote boot image from the plurality of remote boot images should be used for the slave system in response to said interrogation of the slave system and based on said identified characteristics of the slave system; and means for updating the programmable interface of the slave system to cause the slave system to retrieve and boot from the remote boot image, including means for assigning, by the master system, the slave system controller an address or range of addresses to be used by the master system for accessing one or more registers of the slave system controller, and means manipulating, by the master system, said registers of the slave system controller and programming the master system controller such that an address that is part of the boot-code range of addresses is redirected for accessing the remote boot image by the slave system.

Claim 46 (canceled)

Claim 47 (currently amended): The apparatus of ~~claim 46~~ claim 45, wherein the slave system includes a boot ROM; and wherein the original boot address refers to a location in the boot ROM for retrieving a locally stored boot image within the slave system.

Claim 48 (canceled)

Claim 49 (previously presented): The apparatus of claim 45, wherein said one or more characteristics include its type.

Claim 50 (previously presented): The apparatus of claim 49, wherein said one or more characteristics include its version.

Claim 51 (previously presented): The apparatus of claim 45, wherein said one or more characteristics include its version.

Claim 52 (currently amended): An apparatus comprising:  
a master system including: a master memory and a storage mechanism for storing a first remote boot image; and a master system controller;

a first slave system including: a first memory and a first programmable interface coupled to the master system, the first programmable interface including a first system controller; and

wherein the master system is configured to ~~perform one or more operations to identify one or more characteristics of the first slave system after the master system is booted and the first system controller is released by the master system, said operations including interrogating~~ interrogate the first slave system to identify ~~their respective said one or ore~~ characteristics of the first slave system; wherein the master system is configured to determine that the first remote boot image should be used for the first slave system in response to said interrogation of the first slave system and based on said identified characteristics of the first slave system, and to update the first programmable interface to cause the first slave system to retrieve the first remote boot image and to boot from said retrieved first remote boot image; wherein said operation of updating the first programmable interface includes: the master system assigning the first system controller an address or range of addresses to be used by the master system for accessing one or more registers of the first system controller; and the master system manipulating said registers of the first system controller and programming the master system controller such that an address that is part of the boot-code range of addresses is redirected for accessing the first remote boot image by the first slave system.

Claim 53 (previously presented): The apparatus of claim 52, wherein said one or more characteristics include its type.



Claim 54 (previously presented): The apparatus of claim 53, wherein said one or more characteristics include its version.

Claim 55 (previously presented): The apparatus of claim 52, wherein said one or more characteristics include its version.

Claim 56 (canceled)

Claim 57 (currently amended): The apparatus of ~~claim 56~~ claim 52, wherein the first slave system includes a boot ROM; and wherein the original boot address refers to a location in the boot ROM for retrieving a locally stored boot image within the first slave system.

Claim 58 (new): The apparatus of claim 8, wherein the master system is configured to scan the bus looking for system controllers of slave systems in order to discover the first system controller and the second system controller prior to said operation of interrogating the first and the second slave systems.

Claim 59 (new): The apparatus of claim 58, wherein the bus is a PCI bus.

Claim 60 (new): The apparatus of claim 8, wherein the bus is a PCI bus.

Claim 61 (new): The method of claim 13, wherein the master system is said communicatively coupled to the slave system via a PCI bus.

Claim 62 (new): The apparatus of claim 45, wherein the master system is communicatively coupled to the slave system via a bus.

Claim 63 (new): The apparatus of claim 62, wherein the bus is a PCI bus.

Claim 64 (new): The apparatus of claim 52, wherein the master system is communicatively coupled to the slave system via a bus.

Claim 65 (new): The apparatus of claim 64, wherein the bus is a PCI bus.